Welcome to STN International! Enter x:x

LOGINID: SSSPTA1612RXD

PASSWORD:

NEWS HOURS

NEWS LOGIN

NEWS IPC8

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
* * * * * * * * * *
                     Welcome to STN International
                 Web Page for STN Seminar Schedule - N. America
NEWS
NEWS
         JAN 02
                 STN pricing information for 2008 now available
         JAN 16 CAS patent coverage enhanced to include exemplified
NEWS
                 prophetic substances
         JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new
NEWS 4
                 custom IPC display formats
NEWS 5 JAN 28 MARPAT searching enhanced
NEWS 6 JAN 28 USGENE now provides USPTO sequence data within 3 days
                 of publication
NEWS 7 JAN 28
                 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9 FEB 08 STN Express, Version 8.3, now available
                 PCI now available as a replacement to DPCI
NEWS 10 FEB 20
NEWS 11 FEB 25 IFIREF reloaded with enhancements
NEWS 12 FEB 25
                 IMSPRODUCT reloaded with enhancements
NEWS 13 FEB 29
                 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                 U.S. National Patent Classification
                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
NEWS 14 MAR 31
                 IPC display formats
NEWS 15 MAR 31 CAS REGISTRY enhanced with additional experimental
                 spectra
NEWS 16
         MAR 31
                 CA/CAplus and CASREACT patent number format for U.S.
                 applications updated
NEWS 17 MAR 31
                 LPCI now available as a replacement to LDPCI
         MAR 31
NEWS 18
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19
         APR 04 STN AnaVist, Version 1, to be discontinued
NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
             AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008
```

Enter NEWS followed by the item number or name to see news on that specific topic.

Welcome Banner and News Items

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

STN Operating Hours Plus Help Desk Availability

For general information regarding STN implementation of IPC 8

FILE 'HOME' ENTERED AT 17:58:03 ON 07 APR 2008

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE Do you want to switch to the Registry File? Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 17:58:25 ON 07 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 APR 2008 HIGHEST RN 1012582-98-7 DICTIONARY FILE UPDATES: 6 APR 2008 HIGHEST RN 1012582-98-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

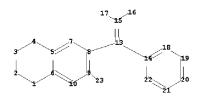
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\08141496.str



chain nodes :

13 15 16 17 23

ring nodes :

1 2 3 4 5 6 7 8 9 10 14 18 19 20 21 22

chain bonds :

8-13 9-23 13-14 13-15 15-16 15-17

ring bonds :

 $1-2^{-}$ 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 14-18 14-22 18-19 19-20

20-21 21-22

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 9-23 15-16 15-17

exact bonds :

8-13 13-14 13-15

normalized bonds :

5-6 5-7 6-10 7-8 8-9 9-10 14-18 14-22 18-19 19-20 20-21 21-22

G1:C,H

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

10:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS

20:CLASS 21:CLASS 22:CLASS 23:CLASS

L1 STRUCTURE UPLOADED

=> s 11

SAMPLE SEARCH INITIATED 17:58:42 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 262 TO ITERATE

100.0% PROCESSED 262 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 4269 TO 6211 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 ful

FULL SEARCH INITIATED 17:58:48 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 5969 TO ITERATE

100.0% PROCESSED 5969 ITERATIONS 16 ANSWERS

SEARCH TIME: 00.00.01

L3 16 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

SINCE FILE TOTAL ENTRY SESSION 178.36 178.57

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 17:58:51 ON 07 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 7 Apr 2008 VOL 148 ISS 15 FILE LAST UPDATED: 6 Apr 2008 (20080406/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 13

L4 10 L3

=> d abs fbib hitstr 1-10

- L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN
- AB Retinoid X receptors (RXRs) play a crit. role in the regulation of many biol. activities and their specific agonists, including oxime ligands, functionally activate both homodimer RXR:RXR and heterodimer RXR:PPAR, the later relates to insulin sensitization and has a potential application in the treatment of type II diabetes. Based on RXR and 9-cis-RA complex crystallog. data, interaction between these compds. and RXR are simulated with DOCK 4.0. After minimizing each ligand-receptor complex, from resulting energy and activity an equation is deduced with the correlation coefficient R2 = 0.64. Two CoMFA models are built and compared. One model originates from the ligand conformation extracted directly from complex, the other from energy-minimized ligands. The higher significance of the former than that of the later suggests that the conformation from induced fit of receptor be more reliable.
- AN 2001:895932 CAPLUS Full-text
- DN 136:177481
- TI Molecular modeling and QSAR studies on the interaction mechanism of retinoids binding to RXR
- AU Guo, Zong-Ru; Yi, Xiang; Wang, Min-Min; Chu, Feng-Ming
- CS Institute of Materia Medica, Peking Union Medical College, Chinese Academy

of Medical Sciences, Beijing, 100050, Peop. Rep. China

SO Huaxue Xuebao (2001), 59(11), 1925-1931

CODEN: HHHPA4; ISSN: 0567-7351

PB Kexue Chubanshe

DT Journal

LA Chinese

IT 153559-58-1 158499-05-9

RL: PAC (Pharmacological activity); BIOL (Biological study)

(mol. modeling and QSAR studies on interaction mechanism of retinoids binding to RXR)

RN 153559-58-1 CAPLUS

CN Benzoic acid, 4-[1-(5,6,7,8-tetrahydro-3-hydroxy-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]- (CA INDEX NAME)

RN 158499-05-9 CAPLUS

CN Benzoic acid, 4-[1-(5,6,7,8-tetrahydro-3-methoxy-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]- (CA INDEX NAME)

II

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN GI

AΒ Title compds. (I, II, etc.; R1-R4 = H, alkyl, aralkyl, heteroarylalkyl; R5 =alkyl, heteroalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl, amino, alkoxy, etc.; R14, R15 = H, alkyl, acyl, OH, alkoxy; R14R15 = O, (substituted) methano, oxime, hydrazone, epoxy, 1,3-dioxolanyl, 1,3-dioxanyl, 1,3dithiolanyl, 1,3-dithianyl, oxazolidinyl, etc.; R27-R31 = H, alkyl, heteroalkyl, halo, amino, NO2, OH, alkoxy, etc.; R35-R38 = H, alkyl, OH, alkoxy; R35R36 or R37R38 = keto, or R35R36, R37R38, R35R37, or R36R38 = epoxy; R40 = OH, alkoxy, aralkoxy, heteroaralkoxy, amino; X, Y = C, O, S, N, SO, SO2; W = C, N, S, O; R47 = H, alkyl; R48, R49 = alkyl; R50 = alkyl, heteroalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl, amino, alkoxy, etc.), were prepared Thus, 3-n-propyl-5,6,7,8-tetrahydro-5,5,8,8- tetramethylnaphthalene and monomethyl terephthalate acid chloride in CH2Cl2 were treated with AlCl3 to give after ester hydrolysis 4-[(3-n-propyl-5,5,8,8-tetramethyl-5,6,7,8tetrahydro-2- naphthyl)carbonyl]benzoic acid (III). Title compds. showed antagonist potencies of IC50 = 5-673 nM in a screen using RXR α receptors and LGD1069 as agonist. Capsules, tablets, suppositories, and i.v. dosage forms containing III are given.

AN 1997:361549 CAPLUS Full-text

DN 126:330501

TI Preparation of naphthylcarbonylbenzoates, naphthylmethyloctatrienoates, and related compounds as dimer-selective retinoid X receptor modulators.

IN Canan-Koch, Stacie; Hwang, Chan Kou; Boehm, Marcus F.; Badea, Beth Ann;
Dardashti, Laura J.; Zhang, Lin; Nadzan, Alex M.; Heyman, Richard A.;
Mukherjee, Ranjan; Lala, Deepak S.; Farmer, Luc J.; et al.

PA Ligand Pharmaceuticals Incorporated, USA

SO PCT Int. Appl., 181 pp.

IE, FI

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.							DATE								D	ATE	
ΡI	WO	9712	 853									 1996-				1	9960	 917
		W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BB,	BG,	BR,	ВҮ	, CA,	CH,	CN,	CZ,	DE,	DK,	EE,
			ES,	FΙ,	GB,	GE,	HU,	IL,	IS,	JP,	KE	KG,	KP,	KR,	KΖ,	LK,	LR,	LS,
			LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	ΜX	, NO,	NZ,	PL,	PT,	RO,	RU,	SD,
			SE,	SG,	SI,	SK,	ΤJ,	TM,	TR,	TT,	UA	, UG,	UZ,	VN				
		RW:	KΕ,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	СН	I, DE,	DK,	ES,	FI,	FR,	GB,	GR,
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ	CF,	CG,	CI,	CM,	GΑ,	GN	
										Ţ	US	1995-	4897	P		P 1	9951	006
										Ţ	US	1996-	9884	P		P 1	9960	110
										Ţ	US	1996-	1831	8P		P 1	9960	524
												1996-				P 1	9960	710
	CA	2233	888			A1		1997	0410	(CA	1996-	2233	888		1	9960	917
										Ţ	US	1995-	4897	P		P 1	9951	006
										Ţ	US	1996-	9884	P		P 1	9960	110
										Ţ	US	1996-	1831	8P		P 1	9960	524
												1996-					9960	710
	ΑU	9673	624			Α		1997	0428	Ž	ΑU	1996-	7362	4		1	9960	917
	ΑU	7264	50			В2		2000	1109									
												1995-				P 1	9951	006
										Ţ	US	1996-	9884	P		P 1	9960	110
										Į	US	1996-	1831	8P		P 1	9960	524
										Ţ	US	1996-	2183	9P		P 1	9960	710
												1996-					9960	-
		8732				A1				I	ΕP	1996-	9358	37		1	9960	917
	EP	8732	95			В1		2003	0402									
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	I, IT,	LI,	LU,	NL,	SE,	MC,	PT,

				US 1995-4897P	P 19951006	
				US 1996-9884P	P 19960110	
				US 1996-18318P	P 19960524	
				US 1996-21839P	P 19960710	
				WO 1996-US14876	W 19960917	7
BR	9610875	A	19990713	BR 1996-10875	19960917	7
				US 1995-4897P	P 19951006)
				US 1996-9884P	P 19960110)
				US 1996-18318P	P 19960524	Į
				US 1996-21839P	P 19960710)
				WO 1996-US14876	W 19960917	
.TP	2002515025	Т	20020521	JP 1997-514275	19960917	
OI	2002313023	_	20020321	US 1995-4897P	P 19951006	
				US 1996-9884P		
					P 19960110	
				US 1996-18318P	P 19960524	
				US 1996-21839P	P 19960710	
				WO 1996-US14876	W 19960917	
ΑT	236115	T	20030415	AT 1996-935837	19960917	7
				US 1995-4897P	P 19951006)
				US 1996-9884P	P 19960110)
				US 1996-18318P	P 19960524	Į
				US 1996-21839P	P 19960710)
				WO 1996-US14876	W 19960917	
ES	2190479	Т3	20030801	ES 1996-935837	19960917	
	2230273		2000001	US 1995-4897P	P 19951006	
				US 1996-9884P	P 19960110	
				US 1996-18318P	P 19960524	
	1006600	- 0	0000000	US 1996-21839P	P 19960710	
	1336600	A2	20030820	EP 2003-7532	19960917	'
EP	1336600	A3	20040707			
	R: AT, BE,	CR DE	סמ סמ אם			•
		CII, DE,	DR, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PI	• •
	IE, FI	CII, DE,	DK, ES, FK,			
		CII, DE,	DR, ES, FR,	US 1995-4897P	P 19951006	
		CII, DE,	DK, ES, FR,		P 19951006	
		CII, DE,	DR, ES, FR,	US 1995-4897P	P 19951006	
		CII, DE,	DR, ES, FR,	US 1995-4897P US 1996-9884P	P 19951006 P 19960110	; ; ;
		CII, DE,	DR, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P	P 19951006 P 19960110 P 19960524 P 19960710	;) <u> </u>
PΤ	IE, FI			US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917	; ; ; ;
PT		T	20030829	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
PΤ	IE, FI			US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 19960917 P 19951006	
PΤ	IE, FI			US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-9884P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110	5 1 1 1 7
PT	IE, FI			US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-9884P US 1996-18318P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524	
	IE, FI 873295	Т	20030829	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710	
EP	IE, FI 873295	T A2	20030829	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-9884P US 1996-18318P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524	
EP	IE, FI 873295 1426048 1426048	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 2004-2911	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 19960917	
EP	IE, FI 873295 1426048 1426048 R: AT, BE,	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 19960917	
EP	IE, FI 873295 1426048 1426048	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU,	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 19960917 NL, SE, MC, PT	
EP	IE, FI 873295 1426048 1426048 R: AT, BE,	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 19960917 NL, SE, MC, PT	
EP	IE, FI 873295 1426048 1426048 R: AT, BE,	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 19960917 NL, SE, MC, PT	
EP	IE, FI 873295 1426048 1426048 R: AT, BE,	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 19960917 NL, SE, MC, PT	
EP	IE, FI 873295 1426048 1426048 R: AT, BE,	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 19960917 NL, SE, MC, PT P 19950918 P 19951006	
EP	IE, FI 873295 1426048 1426048 R: AT, BE,	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-9884P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960710 19960917 NL, SE, MC, PT P 19950918 P 19951006 P 19960110	
EP	IE, FI 873295 1426048 1426048 R: AT, BE,	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-9884P US 1996-18318P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 19960917 NL, SE, MC, PT P 19950918 P 19951006 P 19960110 P 19960524	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE, IE, FI	A2 A3 CH, DE,	20030829 20040609 20040616 DK, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-9884P US 1996-18318P US 1996-18318P US 1996-9884P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960710 19960917 NL, SE, MC, PT P 19950918 P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE,	T A2 A3	20030829 20040609 20040616	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-9884P US 1996-18318P US 1996-18318P US 1996-9884P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960524 P 19960710 19960917 NL, SE, MC, PT P 19950918 P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 19971126	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE, IE, FI	A2 A3 CH, DE,	20030829 20040609 20040616 DK, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-9884P US 1996-18318P US 1996-18318P US 1996-18318P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-931613 US 1997-979725 US 1995-3869P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960710 19960917 NL, SE, MC, PT P 19950918 P 19960110 P 19960110 P 19960524 P 19960710 A3 19960917 19971126 P 19950918	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE, IE, FI	A2 A3 CH, DE,	20030829 20040609 20040616 DK, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1996-9884P US 1996-18318P US 1996-18318P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-18318P US 1996-18318P US 1996-21839P EP 1996-931613 US 1997-979725 US 1995-3869P US 1995-4897P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960710 P 19960710 P 19960710 P 19960710 P 19960710 P 19950918 P 19960110 P 19960110 P 19960524 P 19960710 A3 19960917 19971126 P 19950918 P 19951006	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE, IE, FI	A2 A3 CH, DE,	20030829 20040609 20040616 DK, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-18318P US 1996-18318P US 1996-18318P US 1996-18318P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-931613 US 1997-979725 US 1995-3869P US 1995-4897P US 1996-9884P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960710 P 19960710 P 19960710 P 19960710 P 19960710 P 19960710 P 19960110 P 19950918 P 19951006 P 19950018 P 19951006 P 19960110	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE, IE, FI	A2 A3 CH, DE,	20030829 20040609 20040616 DK, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-18318P US 1996-18318P US 1996-21839P EP 1996-931613 US 1997-979725 US 1995-3869P US 1995-3869P US 1995-4897P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-18318P	P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 A9960917 NL, SE, MC, PT P 19950918 P 19960110 P 19960710 A3 19960917 19971126 P 19950918 P 19950918 P 19950918 P 19950918 P 19950918 P 19950918 P 19960110 P 19960524	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE, IE, FI	A2 A3 CH, DE,	20030829 20040609 20040616 DK, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-931613 US 1997-979725 US 1995-3869P US 1995-3869P US 1995-4897P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-18318P US 1996-18318P US 1996-18318P US 1996-21839P	P 19951006 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 A5 19960917 NL, SE, MC, PT P 19950918 P 19950918 P 19960110 P 19960524 P 19960710 A3 19960917 A3 19960917 A3 19960917 B 19950918 P 19950918 P 19960710 A3 19960710	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE, IE, FI	A2 A3 CH, DE,	20030829 20040609 20040616 DK, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-18318P US 1996-18318P US 1996-21839P EP 1996-931613 US 1997-979725 US 1995-3869P US 1995-3869P US 1995-4897P US 1996-931613 US 1997-979725 US 1995-3869P US 1995-3869P US 1996-18318P US 1996-18318P US 1996-18318P US 1996-18318P US 1996-710309	P 19951006 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 A3 19960917 NL, SE, MC, PT P 19950918 P 19951006 P 19960110 P 19960710 A3 19960917 A3 19960917 B9951006 P 19960710 B3 19960917	
EP EP	IE, FI 873295 1426048 1426048 R: AT, BE, IE, FI	A2 A3 CH, DE,	20030829 20040609 20040616 DK, ES, FR,	US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-935837 PT 1996-935837 US 1995-4897P US 1996-18318P US 1996-21839P EP 2004-2911 GB, GR, IT, LI, LU, US 1995-3869P US 1995-4897P US 1996-9884P US 1996-18318P US 1996-21839P EP 1996-931613 US 1997-979725 US 1995-3869P US 1995-3869P US 1995-4897P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-9884P US 1996-18318P US 1996-18318P US 1996-18318P US 1996-21839P	P 19951006 P 19960524 P 19960710 A3 19960917 P 19951006 P 19960110 P 19960524 P 19960710 A5 19960917 NL, SE, MC, PT P 19950918 P 19950918 P 19960110 P 19960524 P 19960710 A3 19960917 A3 19960917 A3 19960917 B 19950918 P 19950918 P 19960710 A3 19960710	

1/	ΙO	3131	86			В1		2002	N826											
1	10	5151	00			DI		2002	0020		US	19	95-4	4897:	P		Р	19	951	006
													996-9				Р		960	
											US	19	996-1	1831	8P		Р	19	960	524
											US	19	996-2	2183	9P		P	19	960	710
													996-t				W	19	960	917
ŀ	ΚR	6252	55			В1		2008	0130				998-						980	
													95-4				Р		951	
													96-9				Р		960	
													96-1				Р		960	
													96-2				P		960	
_		6000	0.60					0001	0500				96-0				W		960	
Ĺ	JS	6228	862			В1		2001	0508				99-3				Б		990	
													95-3 95-4				P		950 [.] 951	
													995-4 996-9				P P		960	
													996-1				P		960.	
													996-2				P		960 960	
)96-1				A3		960	
													997-9						971	
Ţ	JS	6545	049			В1		2003	0408				99-3						990	
													95-4				Р	19	951	006
											US	19	996-9	9884	P		Р	19	960	110
											US	19	996-1	1831	8P		P	19	960	524
											US	19	996-2	2183	9P		P	19	960	710
													996-				вз		960	
Ţ	JS	6316	404			В1		2001	1113				000-						001	
													95-3				Р		950	
													95-4				Ρ		951	
													996-9				Р		960	
													96-1				Р		960	
													996-2 997-9				P 7.1		960 971	
)97-:)99-:						971 990.	
Z	114	7672.	55			В2		2003	1106				01-1				ΔJ		010	
-	10	7072	55			22		2005	1100				96-				А3		960	
Ţ	JS	2002	0193	291		A1		2002	1219				01-8						010	
		6521				В2		2003												
											US	19	997-9	9797.	25		A1	19	971	126
											US	19	999-3	3093	70		АЗ	19	990	511
Ţ	JS	2004	0019	072		A1		2004	0129		US	20	003-3	3605	80				030	
													95-4						951	
													996-9						960	
													96-1						960	
													96-2						960	
													996-'						960' 990'	
71	\ T T	2004	2004	/1.2		A1		2004	0304				999-3 004-2				AS		990 040.	
F	70	2004.	2004	40		AI		2004	0304				996-1				Z 3		960'	
)) 01-1						010	
PATENI	ГЕ	'AMIL'	Y IN:	FORM	ATIO	N:						_ `			_				0 _ 0	
FAN 1	199	7:29	0542																	
F	PAT	ENT 1	. O <i>V</i>			KIN	D	DATE			APF) []	CAT	I NOI	NO.			DA	ΤE	
PI W	 VO	9710	 813			 A1	_	 1997	 0327		 ₩0		 996-t	JS14	 909		_	 19	 960'	917
'	-	W:		AM,	AT,			BB,								CZ,	DE	-		-
								IS,												
								MN,							PT,	RO,	RU	J,	SD,	SE,
								TR,												
		RW:	KE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH	Ι,	DE,	DK,	ES,	FI,	F	₹,	GB,	GR,

WO 9710819			1	19970	327	WO	1996-	US149	04			
1997:32927 PATENT NO.				DATE							DATE	
AU 2004200		P	A1	20040	304	AU AU AU	1999- 2004- 1996- 2001-	2004 7362 18372	13 1 2	A3 A3		
							1997-				19971 19990	
US 6521633			32									
US 2002019	3291	I	1	20021	.219		1996- 2001-			А3	19960 20010	
AU 767255		E	32	20031	.106	US US US US AU	1996- 1996- 1997- 1999- 2001-	18318 21839 97972 3093 18372	3P 9P 25 70	P P A1 A3	19960 19960 19971 19990 20010	524 710 126 511
US 6316404		E	31	20011	.113	US US US US US US	1995- 1996- 1996- 1996- 1997- 2000- 1995- 1995- 1996-	9884F 18318 21839 71030 97972 74568 3869F 4897F	P BP DP D9 25 B1	A1 P P		110 524 710 917 126 222 918 006
US 6228862		E	31	20010	508	US US US US US US	1995- 1996- 1996- 1996- 1996- 1999-	4897F 9884F 18318 21839 71030 3093	P P BP P P 99	P P P P B3	19951 19960 19960 19960 19960 19990	006 110 524 710 917 511 918
us 5972881		Į.	A	19991	.026	US US US US EP US	1995- 1995- 1996- 1996- 1996- 1996- 1997- 1995-	4897F 9884F 18318 21839 93162	P P BP DP 13	P A3	19950 19951 19960 19960 19960 19971 19950	006 110 524 710 917 126
	, BE,	A CH, DE	43		616	WO EP	1995- 1996- 2004- R, IT,	US149 2911	909		19960 19960	917 917
EP 788353 R: CH		FR, GE		19970 , LI,		WO EP	1996- 1996-	US149 93161	909 16	W	19960 19960	917 917
AU 9670744		I	7	19970	409	AU	1995- 1996- 1995-	70744	1	P P	19950 19960 19950	917
CA 2204616			A1 C	20021	327 .217	CA	1990-	22040	010		19960	91 /

FAN

PΙ

		LU,	T 7.7															
														PT,	RO,	RU,	SD,	SE,
	D TaT •							TT,						ES,	DТ	מיז	CD	CD
	KW:													CI,				
		IL,	ΤΙ,	ь∪,	MC,	мь,	F1,	SE,										
													3869				9950	
													1897				9951	
													884				9960	
													1831				9960	
													2183]		9960	
CA	2232	288			A1		1997	0327					2232				9960	
													3869]	P 1	9950	918
													1897]	P 1	9951	006
										US	199	6-9	9884	P]	P 1	9960	110
										US	199	6-1	1831	8P]	P 1	9960	524
										US	199	6-2	2183	9P]	P 1	9960	710
AU	9670	742			А		1997	0409		AU	199	6-	7074	2		1	9960	917
	7259				В2		2000											
								_ 5 _ 5		IJS	199	5-1	3869	P	1	P 1	9950	918
													1897				9951	
													9884				9960	
													1831				9960	
													2183				9960	
	0505	0.0					1000	0000					JS14		,		9960	
	8596				A1		1998			EΡ	т99	6-9	9316	13		1	9960	9 I /
EP	8596				В1		2004											
	R:			CH,	DE,	DK,	ES,	FR,	GB,	GR	:, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	FΙ															
										US	199	5-3	3869	P]	P 1	9950	918
										US	199	5-4	1897	P]	P 1	9951	006
										US	199	6-9	9884	P]	P 1	9960	110
													1831				9960	
													2183				9960	
													JS14				9960	
RR	9610	624			А		1999	N316					1062				9960	
DI	7010	024			7.1		1000	0310					3869		,		9950	
													1897				9951	
													9884				9960	
													1831				9960	
													2183				9960	
													JS14		Ī		9960	
JΡ	1151	1472			Τ		1999	1005					5128				9960	
													3869]	P 1	9950	918
										US	199	5-4	1897	P]	P 1	9951	006
										US	199	6-9	884	P]	P 1	9960	110
										US	199	6-1	1831	8P]	P 1	9960	524
													2183]		9960	
													JS14				9960	
US.	6028	0.52			А		2000	0222					7103		,		9960	
	5020	J J L			11		_000	~					3869		1		9950	
													1897				9951	
													9884				9960	
													1831				9960	
					_								2183]		9960	
RU	2191	007			C2		2002	1020					1073				9960	
													1831]		9960	
									,	WO	199	1–6	JS14	904	Ī	W 1	9960	917
ΕP	1336	600			A2		2003	0820		EΡ	200	3-	7532			1	9960	917
ΕP	1336	600			А3		2004	0707										
	R:			CH,	DE,					GR	k, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,

ΕP	259227 1426048 1426048 R: AT,	DE CI	T A2 A3	20040215 20040609 20040616	US 1995-3869P P 19950918 US 1995-4897P P 19951006 US 1996-9884P P 19960110 US 1996-18318P P 19960524 US 1996-21839P P 19960710 WO 1996-US14904 W 19960917 EP 2004-2911 19960917
	IE,		, Du,	DR, 10, 11,	US 1995-3869P P 19950918 US 1995-4897P P 19951006 US 1996-9884P P 19960110 US 1996-18318P P 19960524
PΤ	859608		T	20040630	US 1995-3869P P 19950918 US 1995-4897P P 19951006 US 1996-9884P P 19960110
ES	2216062		Т3	20041016	US 1996-18318P P 19960524 US 1996-21839P P 19960710 ES 1996-931613 19960917 US 1995-3869P P 19950918 US 1995-4897P P 19951006
US	5972881		А	19991026	US 1996-9884P P 19960110 US 1996-18318P P 19960524
NO	9801192		A	19980518	US 1996-18318P P 19960524 US 1996-21839P P 19960710 US 1996-710309 B3 19960917
US	6228862		В1	20010508	US 1996-18318P P 19960524 US 1996-21839P P 19960710 WO 1996-US14904 W 19960917 US 1999-309370 19990511 US 1995-3869P P 19950918 US 1995-4897P P 19951006
US	6545049		В1	20030408	US 1996-9884P P 19960110 US 1996-18318P P 19960524 US 1996-21839P P 19960710 US 1996-710309 A3 19960917 US 1997-979725 A1 19971126 US 1999-388888 19990902 US 1995-4897P P 19951006 US 1996-9884P P 19960110 US 1996-18318P P 19960710

				US	1996-710427	вз	19960917
US	6316404	B1	20011113	US	2000-745681		20001222
				US	1995-3869P	Р	19950918
				US	1995-4897P	Р	19951006
				US	1996-9884P	P	19960110
				US	1996-18318P	P	19960524
				US	1996-21839P	P	19960710
				US	1997-979725	Α1	19971126
				US	1999-309370	A3	19990511
AU	767255	B2	20031106	AU	2001-18372		20010209
				AU	1996-73624	АЗ	19960917
US	20020193291	A1	20021219	US	2001-850879		20010507
US	6521633	B2	20030218				
				US	1997-979725	Α1	19971126
				US	1999-309370	A3	19990511
US	20040019072	A1	20040129	US	2003-360580		20030205
				US	1995-4897P	Р	19951006
				US	1996-9884P	Ρ	19960110
				US	1996-18318P	Р	19960524
				US	1996-21839P	Р	19960710
				US	1996-710427	ВЗ	19960917
				US	1999-388888	АЗ	19990902
ΑU	2004200443	A1	20040304	ΑU	2004-200443		20040206
				AU	1996-73624	A3	19960917
				ΑU	2001-18372	АЗ	20010209

OS MARPAT 126:330501

IT 189697-50-5P 189697-55-0P 189697-59-4P 189698-07-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of naphthylcarbonylbenzoates, naphthylmethyloctatrienoates,

and

RN

related compds. as dimer-selective retinoid X receptor modulators) 189697-50-5 CAPLUS

CN Benzoic acid, 4-[1-(3-ethoxy-5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]- (CA INDEX NAME)

RN 189697-55-0 CAPLUS

CN Benzoic acid, 4-[1-(3-butoxy-5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} & \text{Me} & \text{H}_2\text{C} \\ \text{OBu-n} \\ \end{array}$$

RN 189697-59-4 CAPLUS

CN Benzoic acid, 4-[1-[3-(heptyloxy)-5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl]- (CA INDEX NAME)

RN 189698-07-5 CAPLUS

CN Benzoic acid, 4-[2-methyl-1-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(phenylmethoxy)-2-naphthalenyl]-1-propenyl]- (9CI) (CA INDEX NAME)

IT 189698-26-8P 189699-09-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of naphthylcarbonylbenzoates, naphthylmethyloctatrienoates,

and

related compds. as dimer-selective retinoid X receptor modulators)

RN 189698-26-8 CAPLUS

CN Benzoic acid, 4-[1-(3-butoxy-5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]-, methyl ester (CA INDEX NAME)

RN 189699-09-0 CAPLUS

CN Benzoic acid, 4-[2-methyl-1-[5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-3-(phenylmethoxy)-2-naphthalenyl]-1-propenyl]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN GI

AΒ Two series of potent retinoid X receptor (RXR)-selective compds. were designed and synthesized based upon recent observation that (E)-4-[2-(5,5,8,8tetramethyl-5,6,7,8-tetrahydro-2-naphthalenyl)-1- propenyl]benzoic acid binds and transactivates only the retinoic acid receptor (RAR) subtypes whereas its 3-Me derivative binds and transactivates both the RAR and RXR subfamilies. Functional groups in the 3-position of the tetrahydronaphthalenes I [R = H, alkyl, halo, OH, OMe; X = O, CH2] results in compds. which elicit potent and selective activation of the RXR class. Such RXR-selective compds. offer pharmacol. tools for elucidating the biol. role of the individual retinoid receptors with which they interact. Activation profiles in cotransfection and competitive binding assays as well as mol. modeling calcns. demonstrate critical structural determinants that confer selectivity for members of the RXR subfamily. The most potent compound of these series, I [R = Me, X = CH2], is the first RXR-selective retinoid (designated as LGD1069) to enter clin. trials for cancer indications.

AN 1994:656056 CAPLUS Full-text

DN 121:256056

TI Synthesis and Structure-Activity Relationships of Novel Retinoid X Receptor-Selective Retinoids

AU Boehm, Marcus F.; Zhang, Lin; Badea, Beth Ann; White, Steven K.; Mais, Dale E.; Berger, Elaine; Suto, Carla M.; Goldman, Mark E.; Heyman, Richard

CS Department of Medicinal Chemistry, Ligand Pharmaceuticals Inc., San Diego, CA, 92121, USA

SO Journal of Medicinal Chemistry (1994), 37(18), 2930-41 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

IT 158499-12-8P 158499-13-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of tetrahydronaphthylethenylbenzoic

acids)

RN 158499-12-8 CAPLUS

CN Benzoic acid, 4-[1-(5,6,7,8-tetrahydro-3-hydroxy-5,5,8,8-tetramethyl-2-

naphthalenyl)ethenyl]-, methyl ester (CA INDEX NAME)

RN 158499-13-9 CAPLUS

CN Benzoic acid, 4-[1-(5,6,7,8-tetrahydro-3-methoxy-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]-, methyl ester (CA INDEX NAME)

IT 153559-58-1P 158499-05-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and retinoid receptor binding of)

RN 153559-58-1 CAPLUS

CN Benzoic acid, 4-[1-(5,6,7,8-tetrahydro-3-hydroxy-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]- (CA INDEX NAME)

RN 158499-05-9 CAPLUS

CN Benzoic acid, 4-[1-(5,6,7,8-tetrahydro-3-methoxy-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]- (CA INDEX NAME)

ANSWER 4 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

Ligands which selectively activate retinoid X receptors (RXR) in preference to AΒ retinoic acid receptors (RAR) are claimed. Claimed per se are several Markush structures, e.g., compds. I [R1, R2 = H, alkyl, acyl; Y = C, O, S, N, CH(OH), CO, SO, SO2, or a salt derivative; R3, R4 = H, alkyl, or is absent; R', R'' = H, alkyl, acyl, OH, alkoxy, thiol, thio ether, amino; or R'R'' = :0, :CH2, :S, :NOH, :NCN, CH2CH2, CH2O, etc.; R5, R6 = H, alkyl, halo, NO2, OH, alkoxy, SH, alkylthio, (di)(alkyl)amino, etc.; X = CO2H or derivs., CHO, tetrazolyl, PO3H2, SO3H, CH2OH, etc.], represented by 43 synthetic examples. Thus, acylation of 1,1,4,4,6-pentamethyl- 1,2,3,4-tetrahydronaphthalene by mono-Me terephthalate using PC15 and then AlC13, and saponification of the ester product, gave title compound II. In a cotransfection assay, II activated RXR subtypes (α, β, γ) with efficacies of 130%, 52%, and 82%, resp. (vs. alltrans-retinoic acid as 100%), but had <2% to <4% efficacy for RAR subtypes. I synergistically increased the activities (e.g., antihyperproliferative) of RAR-active ligands, as well as other hormonal systems (e.g., clofibrate and 1,25-dihydroxyvitamin D activities).

1994:217004 CAPLUS Full-text ΑN

120:217004 DN

Compounds (naphthalene and indane derivatives) having selectivity for ΤI retinoid X receptors

Boehm, Marcus F.; Heyman, Richard A.; Zhi, Lin ΙN

PΑ Ligand Pharmaceuticals Inc., USA

SO PCT Int. Appl., 101 pp.

CODEN: PIXXD2

Patent DT

English LA

FAN.CNT 1

	PATENT NO.					KIN	D	DATE		P	APP	LICA	TION	NO.		D	ATE	
							_			-						_		
ΡI	WΟ	9321	146			A1		1993	1028	V	VО	1993	-US39	44		1	9930	422
		W:	ΑU,	BB,	BG,	BR,	CA,	CZ,	FΙ,	HU,	JР	, KP	, KR,	LK,	MG,	MN,	MW,	NO,
			NZ,	PL,	PT,	RO,	RU,	SD,	SK,	UA								
		RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IE	, IT,	LU,	MC,	NL,	PT,	SE
										Ţ	JS	1992	-8727	07		A 1	9920	422
										Ţ	JS	1992	-9447	83		A 1	9920	911
										Ţ	JS	1993	-3223			A 1	9930	111
										Ţ	JS	1993	-2774	. 7		A 1	9930	305
										Ţ	JS	1993	-5205	1		A 1	9930	421
										Ţ	JS	1993	-5205	0		1	9930	421
	AU	9341	188			Α		1993	1118	I	AU.	1993	-4118	8		1	9930	422
	AU	6754	30			В2		1997	0206									

```
US 1992-872707 A 19920422
                                          US 1992-944783
                                                              A 19920911
                                          US 1993-3223
                                                              A 19930111
                                                              A 19930305
                                          US 1993-27747
                                                              A 19930421
                                          US 1993-52051
                                          WU 1993-US3944
EP 1993-910835
                                                              A 19930422
EP 637297
                     A1
                             19950208
                                                                   19930422
EP 637297
                     В1
                             20000823
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                          US 1992-872707 A 19920422
                                          US 1992-944783
                                                              A 19920911
                                                               A 19930111
                                          US 1993-3223
                                                              A 19930305
                                          US 1993-27747
                                          US 1993-52051 A 19930421
WO 1993-US3944 W 19930422
JP 08505359
                     Τ
                             19960611
                                          JP 1993-518708
                                                                  19930422
JP 3727334
                     В2
                            20051214
                                          US 1992-872707
                                                              A 19920422
                                                               A 19920911
                                          US 1992-944783
                                                               A 19930111
                                          US 1993-3223
                                          US 1993-27747
                                                              A 19930305
                                          US 1993-27747 A 19930305
US 1993-52051 A 19930421
WO 1993-US3944 W 19930422
BR 9306284
                                          US 1992-872707 A 19920422
US 1992-944783 A 19920911
US 1993-3223
                     Α
                             19980113
                                          BR 1993-6284
                                                                   19930422
                                          A 19930111

D 1993-27747 A 19930305

US 1993-52051 A 19930421

WO 1993-US3944 W 19930400

RU 1994-46440
                     C1
RU 2144913
                            20000127
                                                              A 19920422
                                          US 1992-872707
                                                               A 19920911
                                          US 1992-944783
                                          US 1993-3223
                                                              A 19930111
                                                              A 19930305
                                          US 1993-27747
                                         US 1993-52051
WO 1993-US3944
EP 1999-118827
                                                              A 19930421
                                                              W 19930422
EP 983991
                     A2
                             20000308
                                                                  19930422
EP 983991
                      АЗ
                             20010117
EP 983991
                      В1
                             20031217
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                          US 1992-872707 A 19920422
                                          US 1992-944783
                                                              A 19920911
                                          US 1993-3223
                                                              A 19930111
                                          US 1993-27747
                                                              A 19930305
                                                              A 19930421
                                          US 1993-52051
                                          EP 1993-910835 A3 19930422
EP 1999-118828 19930422
EP 983992
                      Α2
                             20000308
EP 983992
                     А3
                             20001129
EP 983992
                     B1 20051026
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                          US 1992-872707 A 19920422
                                          US 1992-944783
                                                              A 19920911
                                                               A 19930111
                                          US 1993-3223
                                                           A 19930305
A 19930421
A3 19930422
                                          US 1993-27747
                                          US 1993-52051
                                          EP 1993-910835
AT 195716
                     Τ
                             20000915
                                          AT 1993-910835
                                                                  19930422
                                          AT 1993-910835 19930422
US 1992-872707 A 19920422
US 1992-944783 A 19920911
```

									3223 27747		19930111 19930305	
									52051		19930421	
									US3944		19930422	
ES	2149814			Т3	200	01116			910835		19930422	
									872707		19920422	
							US	1992-	944783		19920911	
							US	1993-	3223	А	19930111	_
							US	1993-	27747	А	19930305)
PT	637297			T	200	10131	PT	1993-	910835		19930422	2
							US	1992-	872707	A	19920422	2
							US	1992-	944783	А	19920911	_
							US	1993-	3223	A	19930111	_
							US	1993-	27747	A	19930305)
							US	1993-	52051	A	19930421	_
ΑT	256653			T	200	40115	AT	1999-	118827		19930422	2
							US	1992-	872707	А	19920422	2
							US	1992-	944783	A	19920911	-
								1993-		A	19930111	_
							US	1993-	27747	A	19930305)
							US	1993-	52051	A	19930421	_
ΑT	307795			Τ	200	51115	AT	1999-	118828		19930422	2
							US	1992-	872707	A	19920422	2
							US	1992-	944783	A	19920911	_
							US	1993-	3223	A	19930111	_
							US	1993-	27747	A	19930305	
							US	1993-	52051	А	19930421	_
CA	2153235			A1	199	40721	CA	1993-	2153235		19931022	2
CA	2153235			С	200	50823						
							US	1993-	3223	А	19930111	-
							US	1993-	27747	A	19930305	
							US	1993-	52051	A	19930421	-
WO	9415901			A1	199	40721	WO	1993-	US10094		19931022	2
	W: AU,	BB,	BG,	BR,	CA, CZ	, FI,	HU, J	P, KP,	KR, LK,	MN, MW	, NO, NZ	,
	PL, 1	PT,	RO,	RU,	SD, SK	, UA						
	RW: AT,	BE,	CH,	DE,	DK, ES	, FR,	GB, G	R, IE,	IT, LU,	MC, NL	, PT, SE	3
							US	1993-	3223	A	19930111	-
									27747			
							US	1993-	52051	A	19930421	
WO	9415902			A1					US10204			
							HU, J	P, KP,	KR, LK,	MN, MW	, NO, NZ	,
					SD, SK							
	RW: AT,	BE,	CH,	DE,	DK, ES	, FR,						
									3223		19930111	
									27747		19930305	
									52051		19930421	
	9455868			A		40815	AU	1994-	55868		19931022	2
AU	691477			В2	199	80521						
								1993-			19930111	
								1993-			19930305	
								1993-			19930421	
	0.460050			-		40025			US10204		19931022	
ΑU	9462258			А	199	40815		1994-			19931022	
								1993-			19930111	
								1993-			19930305	
								1993-			19930421	
O 7	0150000			70 1	100	E0000			US10094		19931022	
CA	2153236			A1	199	50209			2153236		19931022	
								1993-			19930111	
							US	1993-	Z / / 4 /	A	19930305)

WO	9504036 W: AU,	BB,	BG,	BR,	CA,		FI,										
	PL, RW: AT,	•				SK, ES,		US	19	93-	3223	LU,	I	1	9930	111	
AU	9456642			А		1995()228	US AU US US US	19 19 19 19	93- 94- 93- 93-	5205 5664 3223 2774 5205	0 2 7	F F F	1 1 1 1 1 1	9930 9931 9930 9930 9930	421 022 111 305 421	
	678086 678086					19951 19991					9011		·		9931		
	R: AT,							US US	19 19	93- 93-	3223 2774	LI, 7 1 204	P P	1 1	9930 9930	111 305	SE
EP	678087			A1		19951	1025	EP	19	94-	9021	84	•	1	9931		
ΕP	678087			В1		1999(0317										~-
	R: AT,	BE,	СН,	DE,	DK,	ES,	FR,	US US	19 19	93- 93-	3223 2774	11, 7	P P	1	9930 9930	111 305	SE
BR	9307784			А		19951	1114	WO BR US	19 19 19	93- 93- 93-	US10 7784 3223	166	V 2	I 1 1	9931 9931	022 022	
								US US WO	19 19 19	93- 93- 93-	2774 5205 US10	7 1 204	I I	1 1 7 1	9930 9930 9931	305 421 022	
JP	08505852			T		19960	0625	US US	19 19	93- 93-	5159 3223 2774	.7	I	1 1	9931 9930 9930	111 305	
AT	177733			T		1999()415	WO AT US	19 19 19	93- 94- 93-	US10	1 204 84	V	7 1 1	9930 9931 9931 9930 9930	022 022 111	
ES	2129115			Т3		1999(0601	US ES US	19 19 19	93- 94- 93-	5205 9021 3223	0 84	I I	1 1 1	9930 9931 9930	421 022 111	
AT	187434			Т		19991	1215	US AT	19 19	93- 94-	2774 5205 9011 3223	0 95	F F	1	9930 9930 9931 9930	421 022	
ES	2139063			Т3		20000	0201	US ES	19 19	93- 94-	2774 5205 9011	1 95	F F	1 1	9930 9930 9931	421 022	
								US US	19 19	93- 93-	3223 2774 5205 US10	7	F F F V	1 1	9930 9930 9930 9931	305 421	
PT	678086			Τ		20000)531	PT US	19 19	94- 93-	9011 3223 2774	95	F	1	9931 9930 9930	022 111	
NO	9403943			А		19941	1221	ИО	19	94-	5205 3943 8727		P P	1	9930 9941 9920	018	

					1992-944783	А	19920911
					1993-3223	A	19930111
					1993-27747	A	19930305
					1993-52051	A	19930421
	F 7 0 0 C 7 C	70	10000714		1993-US3944	A	19930422
US	5780676	A	19980714		1995-485386	DΩ	19950607
					1992-872707 1992-944783		19920422 19920911
					1992-944763	B2 B2	19920911
					1993-3223		19930305
					1993-52050		19930421
					1993-141246		19931022
US	5962731	A	19991005		1995-472784	111	19950607
0.0	0302701		13331000		1992-872707	В2	19920422
					1992-944783		19920911
					1993-3223		19930111
					1993-27747		19930305
				US	1993-52051	В2	19930421
				US	1993-141914	A1	19931022
US	6043279	A	20000328	US	1997-799396		19970212
				US	1992-872707	В2	19920422
					1992-944783	В2	19920911
					1993-3223		19930111
					1993-27747		19930305
					1993-52051		19930421
					1993-141914	В1	19931022
US	6610883	B1	20030826		1998-115615	D 0	19980713
					1992-872707		19920422
					1992-944783 1993-3223		19920911 19930111
					1993-3223		19930111
					1993-52050		19930303
					1993-52051		19930421
					1993-141246		19931022
					1995-485386		19950607
US	6320074	В1	20011120		1998-179674		19981027
					1992-872707	В2	19920422
				US	1992-944783	В2	19920911
				US	1993-3223	В2	19930111
				US	1993-27747	В2	19930305
				US	1993-52051	В2	19930421
					1993-141496	Α1	
					1995-479920	В1	19950607
GR	3032841	Т3	20000731		2000-400533		20000303
					1993-3223	A	19930111
					1993-27747	A	19930305
					1993-52051	A	19930421
CD	3034841	Т3	20010228		1993-US10204 2000-402529	W	19931022 20001113
GK	3034041	13	20010220		1992-872707	7\	19920422
					1992-872707	A A	19920422
					1993-3223	A	19930111
					1993-27747	A	19930305
					1993-52051	A	19930421
					1993-US3944	W	19930422
US	20060106072	A1	20060518		2005-300039		20051213
					1992-872707	В2	19920422
				US	1992-944783	В2	19920911
					1993-3223		19930111
				US	1993-27747	В2	19930305

US 1993-52051 B2 19930421 US 1993-141496 A1 19931022

OS MARPAT 120:217004

IT 153559-58-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as retinoid receptor ligand)

RN 153559-58-1 CAPLUS

CN Benzoic acid, 4-[1-(5,6,7,8-tetrahydro-3-hydroxy-5,5,8,8-tetramethyl-2-naphthalenyl)ethenyl]- (CA INDEX NAME)

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN GI

Ι

$$-N = N$$

$$-N = N$$

$$-N = N$$

$$-N = N$$

AB An electrophotog. photoconductor has on an electroconductive support a photosensitive layer containing a charge-generating azo pigment having a structure in which a substituted or unsubstituted aromatic hydrocarbon or aromatic heterocyclic ring is bonded to an organic residue I (R1, R2 = H, alkyl, acyl, aryl, aralkyl, cyano; R3 = aromatic hydrocarbon or heterocyclic group containing optional substituents; X = organic residue forming polycyclic aromatic ring or heterocycle by fusion with the benzene ring) directly or via a linking group.

AN 1990:506321 CAPLUS Full-text

DN 113:106321

TI Electrophotographic photoconductor containing azo pigment

IN Kashizaki, Yoshiro

PA Canon K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	0111				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 01100560	A	19890418	JP 1987-257377	19871014
	JP 08014703	В	19960214		
				JP 1987-257377	19871014

IT 126620-24-4P 126646-70-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and use of, as electrophotog. charge-generating agent)

RN 126620-24-4 CAPLUS

CN 11H-Benzo[a]carbazol-2-ol, 1,1'-[(9-ethyl-9H-carbazole-2,7-diyl)bis(azo)]bis[3-[2-(2-fluorophenyl)-1-phenylethenyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 126646-70-6 CAPLUS

CN 11H-Benzo[a]carbazole-3-carboxamide, 1-[[7-[[3-(1,2-diphenylethenyl)-2-hydroxy-1-naphthalenyl]azo]-5,5-dioxido-3-dibenzothienyl]azo]-2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

AB Ketones reacted with aluminum phenoxides in refluxing xylene to give 56-91% isomerically pure o-vinyl phenols. E.g., Al(OPh)3, generated in situ from PhOH and Al turnings, reacted with Me2CO (20 h) to give 56% 2-CH2:CMeC6H4OH.

AN 1980:58353 CAPLUS Full-text

DN 92:58353

OREF 92:9659a,9662a

TI Regiospecificity in reactions between metal phenoxides and ketones. One-step synthesis of ortho-vinylphenols

AU Casiraghi, Giovanni; Casnati, Giuseppe; Sartori, Giovanni; Bolzoni, Luciana

CS Ist. Chim. Org., Univ. Parma, Parma, Italy SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1979), (8), 2027-9 CODEN: JCPRB4; ISSN: 0300-922X DTJournal English LA OS CASREACT 92:58353 ΤТ 72471-04-6P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, by reaction of aluminum phenoxide with ketone) 72471-04-6 CAPLUS RN 2-Naphthalenol, 3-(1-phenylethenyl)- (CA INDEX NAME) CN

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

GI For diagram(s), see printed CA Issue.

AB Long-chain alkyl substitution at positions 5, 6, and 8 of 1,3-diaminobenzo[f]quinazoline derivs. (folate antagonist) did not affect or decrease the antibacterial and cytotoxic action compared to that of the parent compds., but increased the antimalarial activity. The most active compound against Plasmodium berghei in mice was 1,3-diamino-6-n-hexylbenzo[f]quinazoline (I) [53526-04-8], which at 640 mg/kg s.c.increased survival time almost 3-fold compared to controls. The most potent antibacterial activity in vitro was shown by 1,3-diamino-6-chlorobenzo[f]quinazoline [53526-05-9] against Streptococcus faecium (50% inhibitory dose 0.003 μ M). I was prepared by reaction of 1-bromonaphthalene [90-11-9] with n-hexyllithium [1934-75-4], nitration in the free position, catalytic hydrogenation to the amine, and reaction with Na dicyanamide.

AN 1975:508137 CAPLUS Full-text

DN 83:108137

OREF 83:16881a,16884a

TI Quinazolines. 12. 1,3-Diaminobenzo[f]quinazolines containing long-chain alkyl or chloro substituents on the central ring. Synthesis and biological evaluation as candidate antifolate and antimalarial agents

AU Rosowsky, Andre; Huang, Ping C.; Papathanasopoulos, Nickolas; Modest, Edward J.

CS Child. Cancer Res. Found., Harvard Med. Sch., Boston, MA, USA

SO Journal of Medicinal Chemistry (1974), 17(11), 1217-22 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

IT 53526-16-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reduction of)

RN 53526-16-2 CAPLUS

CN Naphthalene, 2,2'-(1-heptenylidene)bis[3-methoxy- (CA INDEX NAME)

AΒ

L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

A method is given for the prepn. of intermediates for the synthesis of aldosterone and 18-hydroxycorticosterone. EtMgBr (from Mg 2.432 and EtBr 9.820) in anhydrous Et2O 110 is cooled to 12-15°, freshly distilled ethoxyacetylene 7.88 in anhydrous Et20 51.5 added over 30 min., when ethane ceases to evolve the mixture stirred 15 min. with ice H2O cooling, the system homogenized by addition of C6H6 110, $2 \rightarrow 4\beta$ -lactone of 2α -methallyl- 2β carboxy-4b β -methyl-7,7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β dodecahydrophenanthren- 4β - ol-1-one 7.115 in C6H6 80 parts added dropwise over 15 min. at $0-3^{\circ}$, the mixture stirred 3 hrs. at this temperature, ice and saturated NH4Cl added, the organic layer washed with NH4Cl solution and H2O, dried, filtered, evaporated in vacuo, the residue dissolved in Et2O, filtered through activated C, and concentrated to give 2 ightarrow 4eta-lactone of 1ethoxyethynyl- 2α -methallyl- 2β -carboxy- $4b\beta$ -methyl-7,7-ethylenedioxy- $1, 2, 3, 4, 4a\alpha, 4b, 5, 6, 7, 8, 10, 10a\beta$ -dodecahydrophenanthrene- $1, 4\beta$ -diol (I), m. 138-40°. I 221.3 in anhydrous C5H5N 6500 is agitated with 10% Pd-CaCO3 100 parts at room temperature in H atmospheric, after 1 mole H is absorbed the mixture filtered, the residue washed with C5H5N, the filtrate evaporated to dryness in vacuo, the residue dissolved in Et2O, filtered through activated C, concentrated to a small volume, and cautiously mixed with petr. ether to give $2 \rightarrow 4\beta$ -lactone of 1-ethoxyvinyl- 2α -methallyl- 2β -carboxy- $4\beta\beta$ -methyl-7,7ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β - dodecahydrophenanthrene-1,4 β diol (II), m. $18.5-110^{\circ}$ and $136-7^{\circ}$. To II 4.45 in anhydrous C5H5N 200 under anhydrous N atmospheric is added dropwise 2M SOC12 55 in anhydrous C5H5N at 0- 3° over 5 min., the mixture stirred an addnl. 15 min. at this temperature, poured into M NH4HCO3 1000 and ice 100, the vessel washed with Et2O 1250 parts, after thorough agitation the ether solution washed with ice-cold M NH4HCO3 and ice H2O, dried, filtered, distilled in vacuo, and the residue recrystd. from Et2O to give 2 \rightarrow 4 β -lactone of 1,1-formylmethylene-2- α methallyl- 2β -carboxy- $4b\beta$ -methyl-7,7-ethylenedioxy- $1, 2, 3, 4, 4a\alpha, 4b, 5, 6, 7, 8, 10, 10a\beta$ -dodecahydrophenanthren- 4β - ol (III), m. 188-90°. III 39.85 in anhydrous EtOH 1000 is mixed with 2.5% Pd-SrCO3 10 parts at room temperature under H, after 0.95 mole equivalent H is absorbed the solution filtered, the filtrate evaporated in vacuo, the mixture fractionated on a cellulose column in 80% aqueous MeOH-heptane, and the product recrystd. from Et20-petr. ether to give 2 \rightarrow 4 β -lactone of 1 β -formylmethyl-2 α -methallyl- 2β -carboxy-4b β -methyl- 7,7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β dodecahydrophenanthren-4 β -ol (IV). IV 4.005 in C6H6 50 is mixed with OsO4 2.670, the mixture stirred 3 hrs. under N, MeOH 350 added, the solution mixed with Na2SO3 6.3 in H2O 100, agitated 20 min. under N, filtered, the filtrate freed of organic solvents in vacuo, the aqueous suspension extracted with CH2Cl2, the exts. washed with icecold N Na2CO3 and H2O, dried, evaporated, the product dissolved in MeOH 89 and C5H5N 1, paraperiodic acid 3.4 in H2O 10 parts added, the mixture stirred 1 hr. at room temperature under N, diluted with H2O, extracted with 3:1 Et2O-CH2Cl2, the exts. washed with H2O, dried, and evaporated in vacuo to give $2 \rightarrow 4\beta$ -lactone of 1β -formylmethyl- 2α acetonyl- 2β -carboxy- $4b\beta$ -methyl-7,7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthren-4 β - ol. Prepared similarly are: $2 \rightarrow 4\beta$ -lactone of 1-ethoxyethynyl- 2α -allyl- 2β -carboxy- $4b\beta$ - methyl-7,7- ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β dodecahydrophenanth rene-1,4 β -diol, m. 149-52°; 2 \rightarrow 4 β -lactone of 1-(2-ethoxyvinyl)-2 α -allyl-2 β -carboxy-4b β -methyl-7,7- ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-1,4 β -diol, m. 120-2°; 2 \rightarrow 4 β -lactone of 1 β -formylmethyl-2 α -allyl-2 β -carboxy-4b β -methyl-7,7-ethylenedioxy-1,2,3,4,4a α ,4ab,5,6,7,8,10,10a.bet a.-dodecahydrophenanthren-4 β -ol; 2 \rightarrow 4 β -lactone of 1 β ,2 α -bis(formylmethyl)-2 β -carboxy-4b β -methyl-7,7- ethylenedioxy-1,2,3,4.4a α ,4b,5,6,7,8,10,10a β - dodecahydrophenanthren-4 β -ol; and 2 \rightarrow 4 β -lactone of 1 β -formylmethyl-2 α -(α -acetoxyacetonyl)-2 β -carboxy-4b β -methyl-7,7- ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a.beta .-dodecahydrophenanthren-4 β -ol.

AN 1961:87417 CAPLUS Full-text

DN 55:87417

OREF 55:16506i,16507a-h

TI Polyhydrophenanthrene compounds

IN Reichstein, Tadeus

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	GB 805606		19581210	GB 1957-78257	19550114

IT 103033-89-2

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 103033-89-2 CAPLUS

CN 2-Phenanthreneacrylic acid, 8-carboxy-4b, 5, 6, 7, 8, 8a, 9, 10-octahydro-3-methoxy-4b, 8-dimethyl- β -phenyl- (6CI) (CA INDEX NAME)

L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

Me O-methyl-7-acetylpodocarpate (Ia) 1500 and BrCH2CO2Et 770 in C6H6 2640 AB added with heating to specially prepared Zn 313 parts, the mixture refluxed 2 hrs., unreacted Zn removed, and the mixture acidified gave Me O-methyl-7-[2-(1-ethoxycarbonyl-2-hydroxypropyl)] podocarpate (I), b0.07 190-7°, [α]D 105°. I 1500, AcCl 1650, and Ac20 2300 parts refluxed 50 min. gave Me O-methyl-7-(α methyl- β - ethoxycarbonylvinyl)podocarpate (II), b0.15 195°, [α]D 117°. The β -MeO analog was similarly obtained by substitution of Me bromoacetate. II 288, KOH 100, propylene glycol 2100, H2O 500, and MeOH 320 parts heated 3 hrs. at 90-100° gave Me O-methyl-7-(α -methyl- β -carboxyvinyl)podocarpate (III). [α]D 129°. I 200, H2O 2000, MeOH 3200, and NaOH 300 parts refluxed 4 hrs. gave Me O-methyl-7-[2-(1-carboxy-2- hydroxypropyl)]podocarpate. III heated 1.5 hrs. at 210° with C5H5N.HCl gave the lactone of 7-(α -methyl- β carboxyvinyl)podocarpic acid, m. $287-9^{\circ}$ (MeOH). Me O-methylpodocarpate and PhCl at 10° treated 10 min. with AlCl3, the mixture stirred 3 hrs. at 10° with EtCOCl in PhCl, left 15 hrs. at room temperature, decomposed, the PhCl steam distilled, and the solid recrystd. gave Me O-methyl-7-propionylpodocarpate

(IV), m. $100-2^{\circ}$ (MeOH). IV in C6H6 treated as above with BrCH2CO2Et and Zn dust gave after acetylating, Me O-methyl-7-(α -ethyl- β ethoxycarbonylvinyl)podocarpate (V), b0.01 185-95°. V, KOH, MeOH, H2O, and propylene glycol heated 3 hrs. gave Me O-methyl-7-(α -ethyl- β carboxyvinyl)podocarpate. Ia and MeCHBrCO2Et in C6H6 treated with Zn and the mixture refluxed 2 hrs. gave Me O-methyl-7-[2-(2-hydroxy-3-ethoxycarbonylbutyl]podocarpate (VI), b0.08 200°. VI, AcCl, and Ac20 refluxed 1 hr. and distilled gave Me O-methyl-7-(α , β -dimethyl- β ethoxycarbonylvinyl)podocarpate (VII), b0.1 190°. VII 100, KOH 35, propylene glycol 720, H2O 180, and MeOH 100 parts heated 3 hrs. at 90-100° gave Me Omethyl-7- $(\alpha, \beta$ -dimethyl- β -carboxyvinyl)podocarpate. Et2SO4 refluxed 5 min. with podocarpic acid and NaOH in 50% alc. gave Et O-ethylpodocarpate (VIII). VIII treated with AcCl, PhNO2, and AlCl3 3 hrs. at 0° and left 100 hrs. gave Et Oethyl-7-acetylpodocarpate (IX). IX treated with Et 2-bromohexanoate and the product dehydrated and hydrolyzed gave Et O-ethyl-7-(α -methyl- α -butyl- β carboxyvinyl)podocarpate, $[\alpha]D$ 106°. Me O-methylpodocarpate treated 18 hrs. at 25° with AlCl3, BzCl, and PhCl gave Me O-methyl-7-benzoylpodocarpate, m. 114-19°. This material converted into Me O-methyl-7-(α -phenyl- β ethoxycarbonylvinyl)podocarpate (X), m. 163-5.5°. X heated 1.5 hrs. at 210° with C5H5N.HCl gave the lactone of 7-(α -phenyl- β -carboxyvinyl)-podocarpic acid (XI), m. $242-5^{\circ}$. XI in MeOH left 0.5 hr. with Et2SO4 and Na2CO3 gave the lactone of Et 7-(α -phenyl- β -carboxyvinyl)podocarpate. X in H2O autoclaved 8 hrs. at 150° with alc. and KOH gave O-methyl-7-(α -phenyl- β carboxyvinyl)podocarpic acid (XII). XII and C5H5N.HCl heated 10 min. at 210° and the product chromatographed on silica gel gave lactone of Me $7-(\alpha-\text{methyl} \beta$ - carboxyvinyl)podocarpate, m. 267-9° (CHCl3-MeOH). V in C5H5N.HCl heated 1.5 hrs. at 210° gave lactone of 7-(α -ethyl- β - carboxyvinyl)podocarpic acid. 1961:87416 CAPLUS Full-text 55:87416

DN

ΑN

OREF 55:16506c-i

 $1,12-Dimethyl-6-hydroxy-7-(\beta-carboxyalkenyl)-1,2,3,4,9,10,11,12-$ ТΤ octahydrophenanthrene-I-carboxylic acid esters

Bible, Roy H., Jr. IN

G.D. Searle and Co. PA

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2971008		19600000	US	

103033-89-2 124422-36-2 ΙT

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 103033-89-2 CAPLUS

CN 2-Phenanthreneacrylic acid, 8-carboxy-4b,5,6,7,8,8a,9,10-octahydro-3methoxy-4b, 8-dimethyl- β -phenyl- (6CI) (CA INDEX NAME)

RN 124422-36-2 CAPLUS

CN 2-Phenanthreneacrylic acid, 8-carboxy-4b,5,6,7,8,8a,9,10-octahydro-3-methoxy-4b,8-dimethyl- β -phenyl-, 2-ethyl 8-methyl ester (6CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

AB Indan (I) or I-contg. hydrocarbon mixts. were catalytically dehydrogenated at $550-670^{\circ}$ in the presence of oxides of W, Mo, or Mn. or their mixts. and of steam to give indene (II). Thus, 50 cc. I and 75 cc. H2O was passed as vapor during 2 hrs. through a heated quartz tube $(600-50^{\circ})$ containing 230 cc. 1:1 MnO2-MoO3 on pumice to give a product containing 75% II.

AN 1961:87415 CAPLUS Full-text

DN 55:87415

OREF 55:16506b-c

TI Indene

IN Franck, Heinz Gerhard; Grigoleit, Georg

PA Gesellschaft fur Teerverwertung m. b. H.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
Ι	DE 1074578		19600204	DE	

PI DE 1074578 IT 124422-36-2

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 124422-36-2 CAPLUS

CN 2-Phenanthreneacrylic acid, 8-carboxy-4b,5,6,7,8,8a,9,10-octahydro-3-methoxy-4b,8-dimethyl- β -phenyl-, 2-ethyl 8-methyl ester (6CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

=> logoff y COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	66.35	244.92
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.00	-8.00

STN INTERNATIONAL LOGOFF AT 18:04:48 ON 07 APR 2008